

Amendments to the Claims:

Please amend the claims as follows:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for manufacturing a semiconductor device, comprising:
forming an amorphous semiconductor film on an insulating surface;
adding a metal element for promoting crystallization to the amorphous semiconductor film;
heating the amorphous semiconductor film to form a crystallized semiconductor film;
irradiating a continuous wave laser beam to the crystallized semiconductor film; and
removing an upper portion of the crystallized semiconductor film to which the continuous wave laser beam is irradiated.
2. (Original) A method according to claim 1, wherein the upper portion is a region including the metal element.
3. (Currently Amended) A method for manufacturing a semiconductor device, comprising:
forming an amorphous semiconductor film on an insulating surface;
adding a metal element for promoting crystallization to the amorphous semiconductor film;
heating the amorphous semiconductor film to form a crystallized semiconductor film;
irradiating a continuous wave laser beam to the crystallized semiconductor film; and
removing an upper portion of the crystallized semiconductor film to which the continuous wave laser beam is irradiated to reduce a concentration of the metal element in the crystallized semiconductor film to a lower detection limit of SIMS (secondary ion mass spectroscopy).
4. (Original) A method according to claim 3, wherein the upper portion is a region including the metal element.

5. (Original) A method according to claim 3, wherein the lower detection limit of SIMS (secondary ion mass spectroscopy) is $1 \times 10^{17} /cm^3$.

6. (Original) A method according to claim 1, wherein the upper portion is removed by one of wet etching, dry etching, and CMP (Chemical Mechanical Polishing).

7. (Currently Amended) A method according to claim [[4]] 3, wherein the upper portion is removed by one of wet etching, dry etching, and CMP (Chemical Mechanical Polishing).

8. (Original) A method according to claim 1, wherein the continuous wave laser beam is emitted from one of continuous wave Nd:YAG laser, continuous wave Nd:YVO₄ laser, continuous wave Nd:YLF laser, continuous wave Nd:YAlO₃ laser, continuous wave glass laser, continuous wave ruby laser, continuous wave alexandrite laser, and continuous wave Ti:sapphire laser.

9. (Currently Amended) A method according to claim [[4]] 3, wherein the continuous wave laser beam is emitted from one of continuous wave Nd:YAG laser, continuous wave Nd:YVO₄ laser, continuous wave Nd:YLF laser, continuous wave Nd:YAlO₃ laser, continuous wave glass laser, continuous wave ruby laser, continuous wave alexandrite laser, and continuous wave Ti:sapphire laser.

10. (Original) A method according to claim 8, wherein the continuous wave laser beam is second harmonic or third harmonic.

11. (Original) A method according to claim 9, wherein the continuous wave laser beam is second harmonic or third harmonic.

12. (Currently Amended) A method according to claim 1, wherein the continuous wave laser beam is emitted [[form]] from one of continuous wave Ar laser and continuous wave Kr laser.

13. (Currently Amended) A method according to claim [[4]] 3, wherein the continuous wave laser beam is emitted [[form]] from one of continuous wave Ar laser and continuous wave Kr laser.

14. (Currently Amended) A method for manufacturing a semiconductor device, comprising:

forming an amorphous semiconductor film on an insulating surface;

adding a metal element for promoting crystallization to the amorphous semiconductor film;

heating the amorphous semiconductor film to form a crystallized semiconductor film;

irradiating a continuous wave laser beam to the crystallized semiconductor film; and

using CMP to remove an upper portion of the crystallized semiconductor film to which the continuous wave laser beam is irradiated.

15. (Original) A method according to claim 14, wherein the upper portion is a region including the metal element.

16. (Original) A method according to claim 14, wherein the continuous wave laser beam is emitted from one of continuous wave Nd:YAG laser, continuous wave Nd:YVO₄ laser, continuous wave Nd:YLF laser, continuous wave Nd:YAlO₃ laser, continuous wave glass laser, continuous wave ruby laser, continuous wave alexandrite laser, and continuous wave Ti:sapphire laser.

17. (Original) A method according to claim 16, wherein the continuous wave laser beam is second harmonic or third harmonic.

18. (Currently Amended) A method according to claim 14, wherein the continuous wave laser beam is emitted [[form]] from one of continuous wave excimer laser, continuous wave Ar laser, and continuous wave Kr laser.

19. (New) A method for manufacturing a semiconductor device, comprising:

forming an amorphous semiconductor film on an insulating surface;

adding a metal element for promoting crystallization to the amorphous semiconductor film;

heating the amorphous semiconductor film to form a crystallized semiconductor film;

irradiating a continuous wave laser beam to the crystallized semiconductor film;

removing an upper portion of the crystallized semiconductor film to which the continuous wave laser beam is irradiated; and

patternning the crystallized semiconductor film into a shape after removing the upper portion of the crystallized semiconductor film.

20. (New) A method according to claim 19, wherein the upper portion is removed by one of wet etching, dry etching, and CMP (Chemical Mechanical Polishing).

21. (New) A method according to claim 19, wherein the continuous wave laser beam is emitted from one of continuous wave Nd:YAG laser, continuous wave Nd:YVO₄ laser, continuous wave Nd:YLF laser, continuous wave Nd:YAlO₃ laser, continuous wave glass laser, continuous wave ruby laser, continuous wave alexandrite laser, and continuous wave Ti:sapphire laser.

22. (New) A method according to claim 21, wherein the continuous wave laser beam is second harmonic or third harmonic.

23. (New) A method according to claim 19, wherein the continuous wave laser beam is emitted from one of continuous wave Ar laser and continuous wave Kr laser.